

Process Sheet

Date: Monday, 05/01/2009 7:57:48 AM
User: Linda Lacelle

Customer : CU-DAR001 Dart Helicopters Services
Job Number : 44355
Estimate Number : 10429
P.O. Number :
This Issue : 05/01/2009 S.O. No. :
Prsht Rev. : NC
First Issue : / / Type : MACHINED PARTS
Previous Run : 42172
Written By :
Checked & Approved By : JUD 08.01.05
Comment : Est: D 04.11.26 Revised Step 7 KJ/JLM

Drawing Name : TUBE ASSEMBLY
Part Number : D3304043
Drawing Number : D3304 REV. B
Project Number : N/A
Drawing Revision : B
Material :
Due Date : 31/01/2009 Qty: 10 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0 M304TR0875W065 304 round tube .875 x .065w



Comment: Qty.: 1.9469 f(s)/Unit Total: 19.4691 f(s)
Material: AISI 304/316 SS tubing 0.875" x 0.065" wall
(M304TR0.875W.065) Batch: 10472

SP 09/01/23

2.0 BAND SAW BAND SAW



Comment: BAND SAW
1- Cut blank: 22.00" as per Dwg D3304

SP 09/01/23 (10)

3.0 LATHE CONV. CONVENTIONAL LATHE



Comment: CONVENTIONAL LATHE
1- Cut blank: 22.00" as per Dwg D3304
2- Turn as per Dwg D3304
3- Deburr

SP 09/01/23 (10)

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SP 09/01/23

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

JL 09/01/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 05/01/2009 7:57:48 AM
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Seq. #: Machine Or Operation: Description :

6.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



(8X)

Comment: SMALL & MEDIUM FAB RESOURCE 1

1- Form as per Dwg D3304

Ensure that bend radius does not fall into straight section using DT8756.

2- Drill as per Dwg D3304 using drill Jig D3304-T1

3- Cut tube to length as per Dwg D3304

4- Deburr

SB 09/02/17

M-L 09/02/17

(PTO)

7.0 QC5 INSPECT WORK TO CURRENT STEP



09-02-18 (8)

Comment: INSPECT WORK TO CURRENT STEP

8.0 D33047 Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Bracket

Pick:

Qty	Part Number	Description	Batch
1	D3304-7	Bracket	44398

BE 09-03-17

9.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld bracket as per Dwg D3304 and QSI 004 using DT8775

BE 09-03-17 XB

10.0 QC9 VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

10 09-03-17 (2)

11.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/03/17 (2)

12.0 POWDER COATING POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

M109648

START TIME:

13:55

OVEN TEMPERATURE:

320

FINISH TIME:

14:25


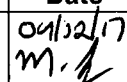


UMD/FZ.

(28)

09/03/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3304-043 PAR #: N/A Fault Category: Defect / FAB ASS. mod. & Small NCR: (Yes) No DQA: D Date: 09/03/12
 Resolution: D412-724-043 SCRAP Disposition: SCRAP QA: N/C Closed: D Date: 09/03/12

NCR: 44355		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/02/17	6	2 parts were scrap at the forming pads were form on the wrong way. Bend in wrong direction. R.C Human error	 05/04/12	Scrap & destroy No replace	09/02/17 M. 	SB 09/02/17	 05/04/12	 09-02-18

NOTE: Date & initial all entries

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Drawing Name: TUBE ASSEMBLY

Job Number: 44355

Part Number: D3304043

Job Number:



Seq. #: Machine Or Operation: Description :

13.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



4J



Comment: INSPECT POWDER COAT

09-03-17

(X8)

14.0

BLBS0016

PIP PIN



Comment: Qty.: 1.0000 Each(s)/Unit Total : ~~10.0000~~ Each(s)
PIP PIN 8

Pick:

Qty	Part Number	Description
1	BLBS-0016	Pip Pin

Batch

M110476

SEP

15.0

CBL460

Loop Sleeve



Comment: Qty.: 2.0000 Each(s)/Unit Total : ~~20.0000~~ Each(s)
Loop Sleeve 16

Pick:

Qty	Part Number	Description
2	CBL-460	Loop Sleeve

Batch

M109062

9/3/18

SP

16.0

CBL1240

Cable



Comment: Qty.: 1.0416 f(s)/Unit Total : ~~10.4160~~ f(s)
Cable 8.3328

Pick:

Qty	Part Number	Description
12.5"	CBL-1240	Cable

Batch

M107234

FF 09-03-19

(8)

17.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble lanyard and pip pin as per Dwg D3304
Identify as D3304-043

FF 09-03-18

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

090320

(8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Part Number: D3304043

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with P/N and B/N as per Dwg using a permanent fine point marker, then Stock

Location: ST 187

SS 09/03/20 (8)

20.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/03/24 J

Job Completion



MF 09-03-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

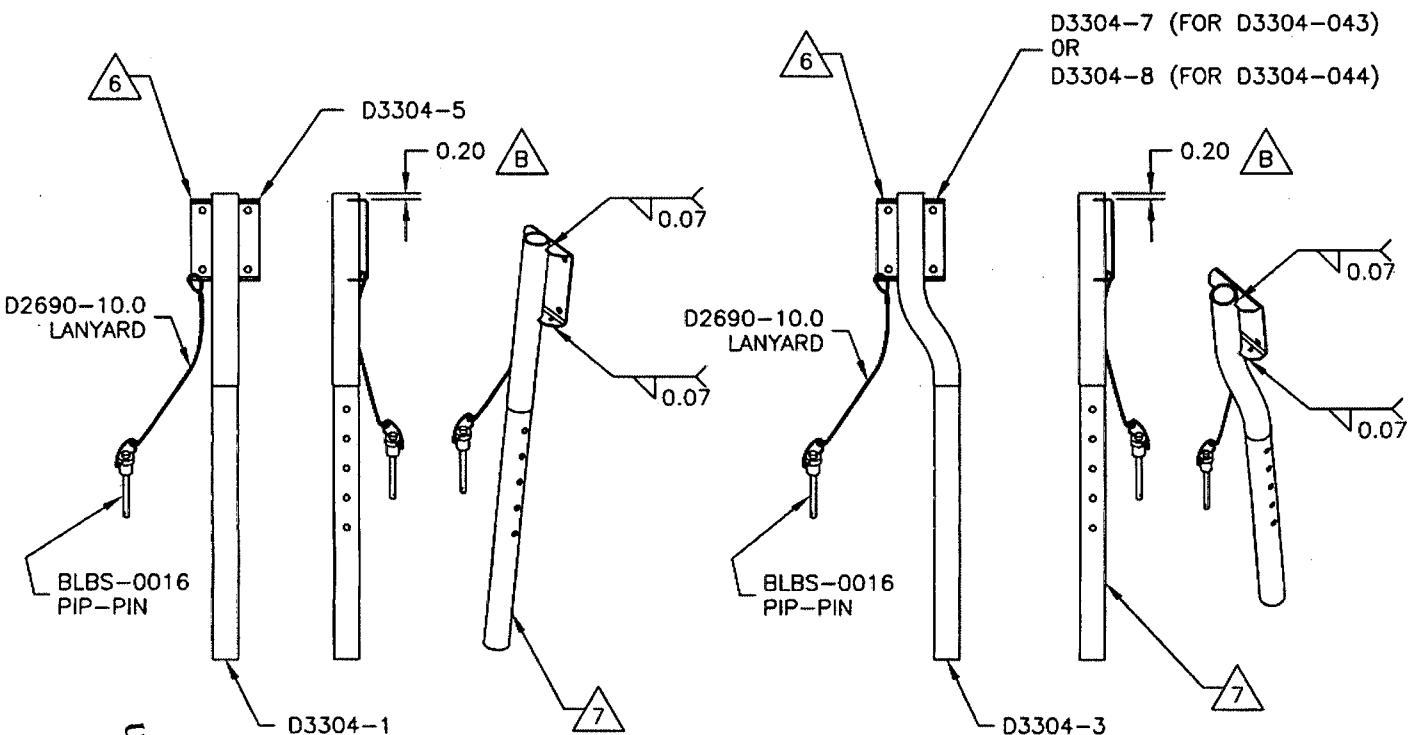
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	RF	DRAWN BY	RF	DART AEROSPACE LTD
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
DATE	05.07.15	TITLE	D3304	REV. B
			TUBE ASSEMBLY	SHEET 1 OF 4
				SCALE
				1:6
A	04.08.18	NEW ISSUE		
B	05.07.15	UPDATE DIMENSIONS: ADD D3304-7/-8		



D3304-041 TUBE ASSEMBLY

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *[Handwritten]*

D3304-041/-043/-044 NOTES:

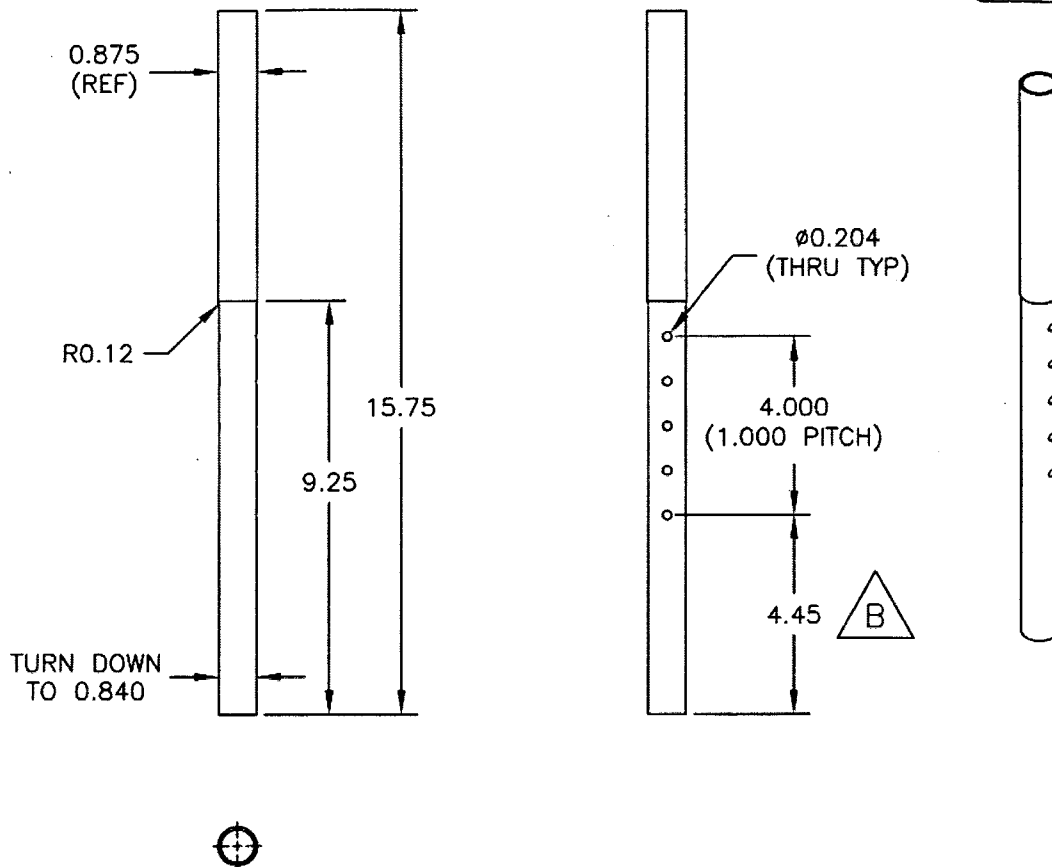
- 1) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 2) WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) IDENTIFY AS INDICATED USING FINE POINT PERMANENT INK MARKER "TCCA-PDA, DART AEROSPACE LTD, P/N D3304-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"
- 7) IF BEING ASSEMBLED WITH D3303-041, ADD THE FOLLOWING USING A FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D412-724-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

RELEASED
05-08-11



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3304	REV. B SHEET 2 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4

RELEASED
05.08.11



D3304-1 TUBE

D3304-1 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE $\phi 0.875 \times 0.065$ WALL
(REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

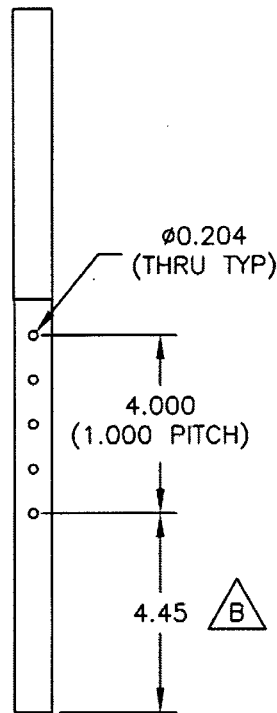
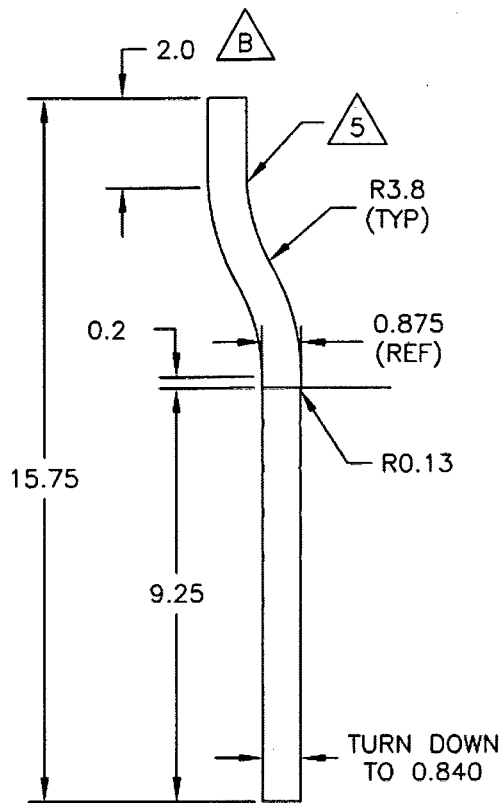
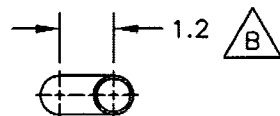
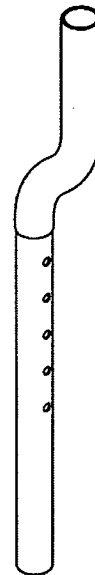
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WORK ORDER
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DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3304	REV. B SHEET 3 OF 4
DATE 05.07.15	TITLE TUBE ASSEMBLY		SCALE 1:4

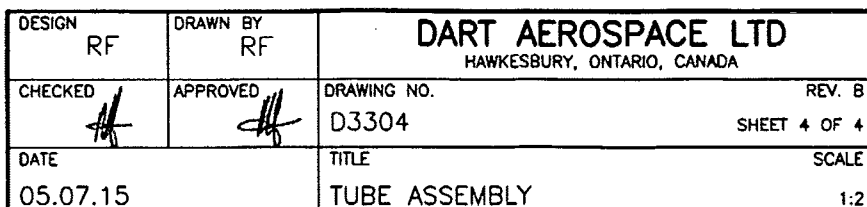
**RELEASED**
05-08-11 *[Signature]***D3304-3 TUBE****D3304-3 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE $\phi 0.875 \times 0.065$ WALL (REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) BEND LINES 9.625, 13.375 DIMENSIONS

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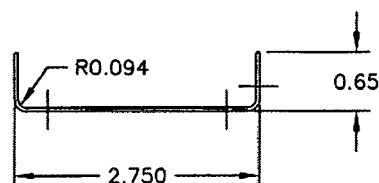


D3304-5 FLAT PATTERN

RELEASE
US-08-11



D3304-7/-8 FLAT PATTERN



D3304-5/-7 BRACKET
D3304-8 OPPOSITE

SECRET
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SUBJECT TO AMENDMENT

NOTES:

- NOTES:
- 1) MATERIAL: AISI 304/316 SS 0.040 THICK SHEET (REF. DART SPEC M304S20GA)
 - 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) ALL DIMENSIONS ARE IN INCHES
 - 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

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WORK ORDER
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